

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method of adjusting an origin of an industrial robot, said method comprising:

providing an industrial robot which includes

a first member having an accommodation hole,

a positioning member ~~arranged to be~~ attached to the first member and being positionable in the accommodation hole,

a second member ~~arranged to rotate relatively~~ being rotatable relative to the first member, the second member having a contact point ~~arranged~~ being operable to contact the positioning member, ~~and~~

a first joint for coupling the first member with the second member;

wherein said positioning member has a first position in which said positioning member protrudes from said first member such that the positioning member is operable to contact the contact point, and a second position in which said positioning member is disposed in the accommodation hole and is not operable to contact the contact point;

~~displaying an~~ a first indication for requesting to enabling to place the positioning member ~~to contact the contact point in the first position;~~

after said displaying the first indication, placing the positioning member in the first position;

after said placing the positioning member in the first position, rotating the second member at the first joint relatively relative to the first member while the positioning member can contact the contact point is in the first position;

during said rotating the second member, detecting whether or not the contact point of the second member contacts is in contact with the positioning member; and

storing a position of the second member as ~~an~~ the origin when ~~detecting that~~ the contact point of the second member ~~contacts~~ is in contact with the positioning member, ~~member;~~

after said storing the position of the second member, positioning the contact point at a predetermined position where the contact point does not contact the positioning member;

displaying a second indication to place the positioning member in the second position;

after said displaying said second indication, placing the positioning member in the second position.

2. (Currently Amended) The method of claim 1, further comprising:

~~—after said storing the position of the second member as the origin, positioning the contact point of the second member at a predetermined position where the contact point does not contact the first member;~~

~~—displaying an indication for disabling the positioning member to contact the contact point;~~
and

confirming whether or not the positioning member cannot contact the contact point.

3. (Currently Amended) The method of claim 2, wherein said confirming whether or not the positioning member cannot contact the contact point comprises rotating the second member at the first joint ~~relatively~~ relative to the first member.

4. (Currently Amended) The method of claim 1, ~~further comprising:~~

~~—displaying an indication for requesting to disable the positioning member to contact the contact point; and~~

~~—positioning the contact point of the second member at a predetermined position by rotating the second member relatively to the first member while the positioning member cannot contact the contact point;~~

wherein said displaying the ~~message for requesting to disable the positioning member to contact the contact point~~ second indication to place the positioning member in the second position is executed before said positioning the contact point of the second member at the predetermined position.

5. (Original) The method of claim 1, wherein the industrial robot further includes a second joint, said method further comprising

selecting the first joint from the first joint and the second joint.

6. (Currently Amended) The method of claim 1, wherein the first joint of the industrial robot further includes a motor for rotating the second member ~~relatively~~ relative to the first member, and

wherein said detecting whether or not the contact point of the second member ~~contacts~~ is in contact with the positioning member comprises detecting ~~whether or not the contact point of the second member contacts the positioning member according to~~ a current flowing in the motor.

7. (New) The method of claim 1, wherein in said second position said positioning member is disposed entirely within said accommodation hole.

8. (New) The method of claim 1, wherein said placing the positioning member in the second position comprises disposing said positioning member entirely within said accommodation hole.

9. (New) A method of adjusting an origin of an industrial robot, said method comprising:
providing an industrial robot which includes
a first member,
a positioning member attached to the first member,
a second member being rotatable relative to the first member, the second member having a contact point being operable to contact the positioning member,
a first joint for coupling the first member to the second member,
wherein said positioning member has a first position in which said positioning member protrudes from said first member such that the positioning member is operable to contact the contact point, and a second position in which said positioning member is disposed in the accommodation hole and is not operable to contact the contact point;
displaying an first indication to place the positioning member in the first position;
rotating the second member at the first joint relative to the first member while the positioning member is in the first position;

detecting whether or not the contact point of the second member is in contact with the positioning member; and

storing a position of the second member as the origin when the contact point of the second member is in contact with the positioning member.

10. (New) The method of claim 9, further comprising:

after said storing the position of the second member as the origin, positioning the contact point of the second member at a predetermined position where the contact point does not contact the first member;

displaying an second indication to place the positioning member in the second position;
and

confirming whether or not the positioning member cannot contact the contact point.

11. (New) The method of claim 10, wherein said confirming whether or not the positioning member cannot contact the contact point comprises rotating the second member at the first joint relative to the first member.

12. (New) The method of claim 9, further comprising:

displaying an second indication to place the positioning member in the second position;
and

positioning the contact point of the second member at a predetermined position by rotating the second member relative to the first member while the positioning member is in the second position,

wherein said displaying the second indication to place the positioning member in the second position is executed before said positioning the contact point of the second member at the predetermined position.

13. (New) The method of claim 9, wherein the industrial robot further includes a second joint, said method further comprising

selecting the first joint from the first joint and the second joint.

14. (New) The method of claim 9, wherein the first joint of the industrial robot further includes a motor for rotating the second member relative to the first member, and

wherein said detecting whether or not the contact point of the second member is in contact with the positioning member comprises detecting a current flowing in the motor.

15. (New) The method of claim 9, wherein said first member comprises an accommodation hole, and wherein in said second position said positioning member is disposed entirely within said accommodation hole.